Abstract of the Disclosure

The invention relates to compounds of formula (I) or (II), which are of interest especially for inhibition of polymerization of amyloid β peptide, as model substances for synthesis of amyloid β peptide-ligands, as tools for the identification of other organic compounds with similar functional properties and/or as ligands for detection of amyloid deposits using e.g., positron emission tomography (PET). Formula (II) is: R_1 - A´ - Y´ - Leu - X´ - Z´ - B´ - R_2 in which X´ means any group or amino acid imparting to the compound according to formula (I) the ability to bind to the KLVFF-sequence in amyloid β peptide, or two amino acids imparting the same ability, but with the proviso that one is not proline; Y´ means any amino acid; Z´ means any non-acidic amino acid; A´ means a direct bond or an α-amino acid bonded at the carboxyl terminal of the α-carboxy group or a di-, tri-, tetra- or pentapeptide bonded at the carboxyl terminal of the α-carboxy group; B´ means a direct bond or an α-amino acid bonded at the α-nitrogen or a di-, tri-, tetra- or pentapeptide bonded at the α-nitrogen of the N-terminal α-amino acid; R_1 is H or -CO-R_3 bonded at the α-amino group of A´; R_2 is H, -OR_4 or NR_5R_6, all bonded to the α-carboxyl group of the α-carboxyterminal of B´; R_3 and R_4 are straight or branched carbon chain of 1-4 carbon atoms; R_5 and R_6 are independently H, alkyl, cycloalkyl, aryl or substituted aryl or together are -$(CH_2)_n$- where n is 4-5; and R_1 and R_2 together can form a hydrocarbon ring or heterocyclic ring; all α-amino acids being either D- or L-isomers.